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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/600,309	06/20/2003	Kenneth Klabunde	33985	6076

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EXAMINER

NGUYEN, CAM N

ART UNIT PAPER NUMBER

1754

DATE MAILED: 05/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/600,309

Applicant(s)

KLABUNDE ET AL.

Examiner

Cam N. Nguyen

Art Unit

1754

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02/28/06 (an amendment/response).
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,5-10,12-14,16-23 and 43-51 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,5-10,12-14,16-23 and 43-51 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on originally filed is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. Applicants' amendment and remarks, filed February 28, 2006, has been made of record and entered. Claims 1, 8, 17-19, 43-44, & 47-48 have been amended. Claims 2, 4, 11, 15, & 24-42 have been canceled.

Claims 1, 3, 5-10, 12-14, 16-23, & 43-51 are currently pending and under consideration.

Claim Objections

2. Claims 1, 8, & 20 are objected to because of the following informalities:

A. In claim 1, line 5, ",and and cations and oxides thereof" should be changed to --,cations thereof, and oxides thereof--.

B. In claim 8, line 4, ",and Pt and cations and oxides thereof" should be changed to -
-, Pt, cations thereof, and oxides thereof--.

C. In claim 20, line 2, "and mixtures thereof" should be changed to --and mixture thereof-- (since only two metal oxides are recited in the claim).

Appropriate correction is required.

3. Claims 20-23 were previously indicated allowable. They have been withdrawn due to further reviewed and consideration of the claims. A new rejection follow.

Claim Rejections - 35 USC § 102(e)

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1, 3, & 5-7 are rejected under 35 U.S.C. 102(e) as being anticipated by Blankenship et al., "hereinafter Blankenship", (US Pat. 6,936,568 B2).

Blankenship discloses a catalyst, which comprises a high surface area inorganic support material and gold (see col. 8, claim 1). Suitable inorganic support materials including zinc oxide, ceria, magnesium oxide, etc. and mixtures thereof (see col. 8, claim 2). The inorganic support materials or carriers preferably having greater than about 150 m²/g, the pore volume is preferably in the range of about 0.2 to about 0.6 cc/g, and the particles can be in the form of a sphere and preferably having a diameter from about 1 to about 8 mm (which is >4nm) (see col. 4, ln 43-62).

No patentable distinction is seen between the claimed composition and the disclosed catalyst composition. Thus, the claims are anticipated by Blankenship.

Claim Rejections - 35 USC § 102(b)

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 8-10, 16, 43-44, 46-48, & 50-51 are rejected under 35 U.S.C. 102(b) as being anticipated by Elliott et al., "hereinafter Elliott", (US Pat. 5,977,013).

Elliott discloses a catalyst which is in the form of a plurality particles wherein each particle has a porous support and an amount of a reduced nickel metal catalyst phase deposited upon the porous support in a first dispersed phase, and an added metal deposited upon the porous support in a second dispersed phase separate and distinct from said first dispersed phase, etc. (see col. 8, claim 1). The added metal is selected from a group consisting of copper, silver, rhenium, tin and combinations thereof (see col. 9, claim 2). The porous support is selected from a group consisting of titania, zirconia, granulated carbons, boehmite, etc. (see col. 9, claim 15).

With respect to the limitation on "said composite retaining at least about 25% of the total pore volume of said first material prior to agglomeration thereof", it is considered this limitation is related to the process of making the composite material requiring agglomeration of the first material. While this process limitation is not disregarded, it has no bearing on the patentability of the claimed product.

It is considered the claims are anticipated by the teaching of the reference because Elliot discloses the same composition as being claimed.

8. Claims 8-10, 12-14, 16, & 43-50 are rejected under 35 U.S.C. 102(b) as being anticipated by Chen et al., "hereinafter Chen", (US Pat. 6,110,862).

Chen discloses a catalytic material comprising a platinum group metal component dispersed on a refractory inorganic oxide support phase, the support phase comprising a first support material having a pore size distribution in which about 98% of the pore volume of the first support material provided by pores that have a radius in the range of about 30 to 240 Angstroms (or 3-24 nm) (see col. 9- col. 10, claim 1). The first support comprises alumina (see col. 10, claim 10). Chen further discloses that the alumina support is a high porosity support material which has a porosity of greater than 0.5 ml/g, preferably at least 0.75 ml/g, a surface area greater than or at least 60 m²/g up to greater than 165 m²/g, and an average pore size or radius in the range of from greater than about 80 to 300 Angstroms (or 8-30 nm) (See col. 5, ln 1-33).

With respect to the limitation on "said composite retaining at least about 25% of the total pore volume of said first material prior to agglomeration thereof", it is considered this limitation is related to the process of making the composite material requiring agglomeration of the first material. While this process limitation is not disregarded, it has no bearing on the patentability of the claimed product.

It is considered the claims are anticipated by the teaching of the reference because Chen discloses the same composition having the same properties as being claimed.

Claim Rejections - 35 USC § 102(e)

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. Claims 17-19 & 20-23 are rejected under 35 U.S.C. 102(e) as being anticipated by Park (US Pat. 6,706,660 B2).

Park discloses a lean NO_x catalyst comprising a substrate; an oxide support material deposited on the substrate; a dopant selected from the group of metals, oxides, and combinations thereof including indium and gallium (see col. 17, claims 1 & 5-8). The substrate is a ceramic honeycomb substrate including at least one of cordierite, alumina and titania (see col. 18, claim 2, & see also claim 4). The alumina support material has a surface area of between about 80 and 300 m²/g, and an average pore size of between about 3 nm and 30 nm in diameter (see col. 18, claim 11-12).

With respect to the limitation on “said composite retaining at least about 25% of the total pore volume of said first material prior to agglomeration thereof”, it is considered this limitation is related to the process of making the composite material requiring agglomeration of the first material. While this process limitation is not disregarded, it has no bearing on the patentability of the claimed product.

It is considered the claims are anticipated by the teaching of the reference because Park discloses the same composition and the same properties as being claimed.

Response to Applicants' Arguments

11. Applicants' response, filed on February 28, 2006, to the office action dated 11/29/05 has been considered, but not deemed persuasive in view of the new ground of rejections above.

Citations

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. All references are cited for related art. See PTO-892 Form prepared attached.

Conclusion

13. Claims 1, 3, 5-10, 12-14, 16-23, & 43-51 are pending. Claims 1, 3, 5-10, 12-14, 16-23, & 43-51 are rejected. No claims are allowed.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Primary Examiner Cam N Nguyen, whose telephone number is 571-272-1357. The examiner can normally be reached on M, W, R, & F, 9:00 AM - 6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman, can be reached on 571-272-1358. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nguyen/cnn *cnn*
May 05, 2006

Cam Nguyen
CAM N. NGUYEN
PRIMARY EXAMINER

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